

overlay – of suitably-coloured transparent material so as appropriately to modify the manner in which external light entering the display from the ambient surroundings is transmitted thereinto and then reflected back.

[c10]

10. A display as claimed in Claim 9, wherein the filter layer is an additional layer formed on the outside, front, surface of the substrate.

[c11]

11. A display as claimed in either of Claims 9 and 10, wherein the use of a coloured filter layer is in addition to the colouring of the phosphor layer and the insulating layer.

[c12]

12. A display as claimed in Claim 11, wherein the phosphor, the insulating layer, and the filter are all coloured different intensities of the same colour, and the colours are darker – more intense – the higher the intrinsic reflectivity of the component.

[c13]

13. A display as claimed in any of Claims 9 to 12, wherein the filter is positioned to cover the entire surface of the display.

[c14]

14. A display as claimed in any of Claims 9 to 13, wherein the reflectance spectrum of the filter is shifted in wavelength compared to the transmittance spectrum of the filter, so that the colour/hue of the emitted light from the phosphor is not the same as that of the reflected light from the very front – the filter – surface of the display.

[c15]

15. An electroluminescent display as claimed in any of the preceding Claims and substantially as described hereinbefore.

Abstract of Disclosure

[0108] Certain materials are electroluminescent, and this electroluminescent effect has been used in the construction of backlights for displays. Such a backlight commonly consists of a transparent front layer (11) known as the substrate carrying over its rear face a transparent electrically-conductive film (12) forming the backlight's front electrode and covered by a layer of electroluminescent/phosphor material (13) over the rear face of which is a high-dielectric layer (16) bearing on its rear face a conductive film (17) forming the backlight's front electrode and covered by a layer of electroluminescent/phosphor material (13) over the rear face of which is a high-

dielectric layer (16) bearing on its rear face a conductive film (17) forming the back electrode. The whole is positioned behind a mask (18) that defines whatever characters the display is to show. This use of a mask has some disadvantages, some of which can be overcome by utilising an array of suitably shaped individual electrodes (21) instead of a continuous one, and by shaping the electroluminescent material itself in discrete areas (43) each tightly matching in shape and size the relevant individual shaped back electrode (21). This latter, however, itself has drawbacks, for the colour of the phosphor commonly contrast with the colour of the surrounding insulating material, so that the discrete areas of phosphor may be visible under ambient light even when in their inactivated, "off", state. The invention deals with this problem by proposing that there be modified - or apparently modified - the colour/reflectivity of one or other (or, indeed, both) of the phosphor (43) and the surrounding insulator material (16) so as to "match" that of the other, and thus cause the phosphor and insulator material to blend with, and so be less distinguishable from, each other.

Figures